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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,210	02/13/2004	Christopher R. Cording	0124-122	2489

6449 7590 01/09/2008

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EXAMINER	
GILBERT, WILLIAM V	

ART UNIT	PAPER NUMBER
3635	

NOTIFICATION DATE	DELIVERY MODE
01/09/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary	Application No.	Applicant(s)	
	10/777,210	CORDING, CHRISTOPHER R.	
	Examiner	Art Unit	
	William V. Gilbert	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-21,23-28,30-42,44-74,76-85 and 87-123* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-21,23-28,30-42,44-74,76-85 and 87-123* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *23 April 2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This is a First Action on the Merits. Claims 4, 22, 29, 43, 75 and 86 are cancelled. Claims 1-3, 5-21, 23-28, 30-42, 44-74, 76-85 and 87-123 are examined.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In *re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3, 5-21, 23-28, 30-42, 44-74, 76-85 and 87-123 are provisionally rejected on the ground of nonstatutory

obviousness-type double patenting as being unpatentable over the claims of copending Application No. 11/396914. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are substantially similar as follows (note that claims that appear in parentheses represent that the claims collectively are similar):

10/777210	11/396914
1, 26	(1+2+20+21)
2, 27, 119	30
3, 28, 77	31
5, 23, 116, 120	32
6	33
7	34
8	35
9, 30, 54, 66, 79, 97	25
16, 37, 84	36
17, 85	37
18, 39	38
19, 40, 59	26
20, 41, 60, 107, 115	27
21, 42, 114	26

47, 61, 71, 90, 117	(1+2)
48, 62, 73, 92, 105, 118	20
49, 63, 74, 93, 106	21
50, 51	22
52, 64, 72, 91	23
53, 65, 76, 94, 101, 109, 123	24
78, 95, 96	1 (the frame is claimed)
87	39
104	(1+22)
108, 121	2

Regarding Claims 71-103, the '914 application discloses the claimed invention except for the method of manufacture. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the article using the method as claimed because the structural end-product is the same, and one of ordinary skill in the art would use the method as claimed to make the invention. Regarding Claims 10-15, 31-36, 44-46, 55-58, 67-70, 80-83, 88, 89, 98-100, 102, 103, 110-113 and 122, the prior art of record discloses the claimed invention except for the values. It would have been obvious at the time the invention was made to a person having ordinary

skill in the art as a matter of design choice to have these limitations in order to have a product (here, a refrigerator door) with minimal thermal conductivity, which would aid in keeping the refrigerator cold and keep outside heat from permeating via the glass door.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3, 5-21, 23-28, 30-42, 44-74, 76-85 and 87-123 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heaney (U.S. Patent No. 4,477,129) in view of Misonou (U.S. Patent No. 6,830,791) and the Applicant's Specification.

Claims 1, 26, 47, 61, 71, 90, 104 and 117: Heaney discloses a door having inner, outer and middle sheets of glass (Fig. 7: 70, 70', 70''), first and second sealants (Fig. 7, the seals are between the glass sheets) and a frame (see Fig. 7, generally). Heaney discloses a coating (75), which may be placed on virtually any of the panels (Col. 8, lines 34-40). Heaney does not disclose two emissivity coatings. Misonou discloses a glass panel system with an emissivity coating (Col. 4, lines 46-50). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use emissive coatings in order to aid in the reduction of heat transfer through the glass sheets. Further, it would have been obvious

at the time the invention was made to a person having ordinary skill in the art as a matter of duplication of parts to have multiple coatings because duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669 (CCPA 1960). See MPEP §2144.04. Next, the prior art of record does not disclose the U-value as claimed. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have this limitation because Applicant states on pages 8 and 9 of the Specification that this is required to comply with US standards and prevent condensation. Per Claim 104, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have the temperature limitations as a design choice in order to have an apparatus that would resist condensation. The phrase "adapted for use in a refrigerator compartment" (e.g. claim 1, lines 1 and 2) is a statement of intended use of the claimed invention and must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Claims 2, 27, 52, 64, 72, 91 and 119: Heaney discloses a first chamber (72), a second chamber (74), and a gas (air) in the chambers.

Claims 3, 6, 28 and 77: the prior art of record does not disclose the thickness nor spacing as claimed. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have this limitation in order to make a relatively light structure that would resist breaking and still function properly.

Claims 5, 23-25, 44-46, 53, 65, 76, 87-89, 94, 101-103, 109, 116, 120 and 123: while the prior art of record does not disclose the heat transfer rate as claimed, it would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have this limitation in order to have a structure that functioned properly to conform to US regulations while preventing the fogging of the panels.

Claims 7 and 8: while the prior art of record discloses the gas is air, it does not disclose that the gases in the two chambers are the same or different. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have this limitation because each inert gas would perform successfully and one could place a different gas in each chamber.

Claims 9, 30, 54, 66, 79 and 97: the gas is air.

Claims 10, 31, 34, 55, 67, 68, 80, 98, 108 and 110: the prior art of record discloses the claimed invention except for the U value of the glass. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have this limitation because Applicant admits in the Specification pages 8 and 9 that a value approximately to 0.2 is required to conform to US performance requirements, and the limitations as claimed are approximate to this value.

Claims 11-15, 32, 33, 35, 36, 56-58, 69, 70, 81-83, 99, 100, 111-113, 121 and 122: the prior art of record discloses the

claimed invention except for the emissivity rating. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have this limitation in order to minimize the level of heat transfer among the panels to prevent condensation.

Claims 16, 37 and 84: the prior art of record discloses the emissivity coating is fluorine doped tin oxide (Misonou (Col. 4, lines 45-50).

Claims 17, 38 and 85: while the prior art of record does not disclose the method of application, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to apply the coating as a spray coating because it is well known to spray liquids onto surfaces to facilitate even coatings.

Claims 18 and 39: the prior art of record discloses a frame (Heaney: Fig. 6), it does not disclose the material of the frame as claimed. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have the frame of aluminum, plastic or fiber glass because

these materials are well known in the art for the use of frames and would perform equally as well.

Claims 19-21, 40-42, 50, 51, 59, 60, 107, 114, 115: while the prior art of record does not disclose the temperatures and humidity as claimed, it would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have the limitations because one of ordinary skill in the art can set the climate control of a refrigerator and building and the prior art of record is capable of not forming condensation.

Claims 48, 62, 73, 92, 105 and 118: the prior art of record (Heaney Fig. 7) discloses a second sealant assembly and a third sheet of glass which form the insulating glass unit.

Claims 49, 63, 74, 93 and 106: the prior art of record discloses a low emissive material for coating the sheets of glass (Misonou Col. 4, lines 45-50)

Claims 78, 95 and 96: the glass is in a door frame (Heaney: Fig. 1).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William V. Gilbert whose telephone number is 571.272.9055. The examiner can normally be reached on Monday - Friday, 08:00 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571.272.6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WVG 02/22/08

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